

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-17 (canceled).

18. (currently amended) A method of treating a patent foramen ovale, the method comprising:

advancing a closure device near a distal end of a catheter ~~into the tunnel of~~ device to tissue of the patent foramen ovale; and

applying energy to the closure device to cause adhesion between the closure device and tissue of the patent foramen ovale, thereby fixing the closure device ~~within the tunnel~~ to tissue of the patent foramen ovale.

19. (original) A method as in claim 18, wherein bipolar radiofrequency energy is used to cause adhesion of the closure device to the tissue.

20. (original) A method as in claim 18, wherein monopolar radiofrequency energy is used to cause adhesion of the closure device to the tissue.

21. (currently amended) A method as is claim 18, wherein applying energy to the closure device comprises applying energy to at least one bioresorbable ~~matrix~~ element.

22. (currently amended) A method as is claim 18, wherein applying energy to the closure device comprises applying energy to at least one non-resorbable ~~patch~~ element.

23. (currently amended) A method as in claim 22, wherein the energy is applied to a ~~patch~~ closure device comprising at least one of a tissue adhesive and a tissue solder.

Claims 24-41 (canceled).

42. (currently amended) Apparatus for treating a patent foramen ovale, the apparatus comprising:

an elongate catheter body having a proximal end and a distal end; and
at least one energy transmission member coupled with the catheter body on
~~adjacent~~ the distal end for transmitting energy to a closure device and tissue of the patent
foramen ovale to close ~~induce closure of~~ the patent foramen ovale.

43. (original) Apparatus as in claim 42, wherein the closure device is
mounted on the at least one energy transmission member.

44. (original) Apparatus as in claim 42, wherein the closure device spans two
or more energy transmission members.

45. (original) Apparatus as in claim 42, wherein the energy transmission
member transmits at least one of radiofrequency, resistive heating, ultrasound, microwave and
laser energy.

46. (currently amended) Apparatus as in claim 42, wherein the at least one
closure device comprises a bioresorbable ~~matrix~~ material.

47. (currently amended) Apparatus as in claim 42, wherein the at least one
closure device comprises a non-resorbable ~~patch~~ material.

48. (currently amended) Apparatus as in claim 42, further including at least
one backstop member coupled with the catheter for engaging left atrial tissue adjacent the patent
foramen ovale to enhance positioning of the closure device ~~patch within the tunnel~~ to tissue of
the patent foramen ovale.

49. (currently amended) Apparatus as in claim 42, further including at least
one expandable balloon member for deploying the closure device ~~patch within the tunnel~~ to
tissue of the patent foramen ovale.

50. (currently amended) Apparatus as in claim 42, ~~wherein~~ further comprising two or more catheter elements adapted to apply lateral force to the patent foramen ovale prior to and/or during closure.

51. (currently amended) Apparatus as in claim 50, ~~wherein the~~ further comprising two or more catheter elements ~~further~~ adapted to apply dilatory forces to the patent foramen ovale prior to and/or during closure.

52. (original) Apparatus as in claim 42, wherein transmission of energy to the closure device activates a tissue solder or tissue adhesive to cause fixation of the closure device to tissue of the patent foramen ovale.

53. (original) Apparatus as in claim 42, wherein the at least one energy transmission member transmits energy through a conductive or low resistance/impedance plane or pathway of the closure device.

54. (previously presented) A method as in claim 18, wherein the closure device is advanced such that no part of the closure device extends into the left atrium.

55. (previously presented) A method as in claim 18, further comprising applying lateral force to the patent foramen ovale with the closure device.

56. (currently amended) A method as in claim 55, further comprising applying dilatory force to the patent foramen ovale during closure ~~with the closure device~~.

57. (previously presented) A method as in claim 18, wherein the energy is applied via at least one energy transmission member disposed near the distal end of the catheter.

58. (previously presented) A method as in claim 18, wherein applying energy comprises applying resistive heating, ultrasound, microwave or laser energy.

59. (previously presented) A method as in claim 18, wherein the energy is applied through a conductive or low-resistance plane of the closure device.

60. (currently amended) A method as in claim 22, further including expanding an expandable balloon member near the distal end of the catheter to deploy the closure device to tissue ~~patch within the tunnel~~ of the patent foramen ovale.

61. (previously presented) Apparatus as in claim 42, wherein the at least one closure device is doped with materials which aid in conduction or reduce resistance or impedance.

62. (previously presented) Apparatus as in claim 54, wherein the doped materials form specific pathways of increased conduction, or reduced resistance or impedance.

63. (previously presented) Apparatus as in claim 54, wherein the doping materials are selected from the group consisting of gold, platinum, iridium, tantalum, tungsten, sodium chloride, alloys or combinations thereof, and resorbable metals such as iron and nickel alloys.

64. (previously presented) Apparatus as in claims 42, wherein the at least one closure device further comprises at least one tissue solder or adhesive.

65. (previously presented) Apparatus as in claims 42, wherein the at least one closure device is designed to absorb blood, the blood acting as an autologous tissue adhesive.

66. (currently amended) Apparatus as in claim 42, wherein the closure device ~~expands~~ is adapted to fill reside in the tunnel of the patent foramen ovale.

67. (previously presented) Apparatus as in claim 42, wherein application of energy to the closure device causes the closure device to conform to geometry of the patent foramen ovale.

68. (currently amended) Apparatus as in claim 42, wherein application of energy to the closure device fixes the closure device to tissue of the patent foramen ovale.

69. (new) Apparatus as in claim 42, wherein the closure device is a matrix.

70. (new) Apparatus as in claim 42, wherein the closure device is a patch.

71. (new) Apparatus as in claim 42, wherein the closure device is configured such that no part of the closure device extends into the left atrium.

72. (new) Apparatus as in claim 69, wherein the matrix device is configured to bridge the septum primum and the septum secundum of the patent foramen ovale.

73. (new) Apparatus as in claim 70, wherein the patch is configured to bridge the septum primum and the septum secundum of the patent foramen ovale.

74. (new) Apparatus as in claim 70, wherein the patch is configured to extend into the tunnel of a patent foramen ovale.

75. (new) Apparatus as in claim 69, wherein the matrix is configured to extend into the tunnel of a patent foramen ovale.